

Amendments to the Specification:

Please replace paragraph [0011] with the following amended paragraph:

[0011] With this constitution, the said means for determining that the cruise control is in operation determines whether or not the cruise control function is carrying out the cruise control, the transmission is controlled such that when it is determined that the cruise control is being in operation, reference to the detected intake air amount is interrupted while interrupting reference to a shifting map based on the intake air amount and the engine rotating number, and reference is instead made to a pseudo intake air amount calculated from a fuel injection amount maintaining the constant speed during the cruise control and the engine rotating number, and also reference is made to a specified shifting map based on the pseudo intake air amount and the engine rotating number. Hence, even when reference cannot be made to the accelerator depression amount by a driver during the automatic cruise of the vehicle due to the cruise control function of the engine controlling means, the transmission can be automatically controlled in a manner similar to the normal driving state of the vehicle. Therefore, production of a shifting map based on a conception that is quite different from the conventional shifting map is not needed. Thus, past experience can be used for extracting therefrom parameters for adjusting the driving performance of the vehicle, and deterioration of efficiency in the controlling operation can be prevented.

Please replace paragraph [0013] with the following amended paragraph:

[0013] With this constitution, the first-mentioned means for determining that the vehicle speed is being limited determines whether or not the vehicle speed is being limited by the vehicle speed limiting function, and the transmission is controlled such that when it is determined that the vehicle speed is being limited, reference to the detected intake air amount is interrupted while

interrupting reference to the shifting map based on the intake air amount and the engine rotating number, reference is instead made to the pseudo intake air amount calculated from the fuel injection amount controlled such that a running speed of the vehicle is suppressed to the speed equal to or less than the predetermined limited value and to the engine rotating number, and further reference is made to the specified shifting map based on the pseudo intake air amount and the engine rotating number. The second means for determining that the cruise control is being carried out determines whether or not the cruise control is being carried out by the cruise control function, and the transmission is controlled such that when it is determined that the cruise control is being carried out, reference to the detected intake air amount is interrupted while interrupting reference to a shifting map based on the intake air amount and the engine rotating number, and reference is instead made to a pseudo intake air amount calculated from a fuel injection amount maintaining the constant speed during the cruise control of the vehicle and to the engine rotating number, and also reference is made to a specified shifting map based on the pseudo intake air amount and the engine rotating number. To this end, even when the fuel injection amount is reduced by the vehicle speed limiting function and the engine rotating state is not in compliance with the depression amount of the accelerator pedal by the driver, the transmission can be automatically controlled in a manner similar to the normal driving state. Further, even when reference to the accelerator depression amount by the driver cannot be made during the automatic cruise of the vehicle by the cruise control function, the transmission can be automatically controlled in a manner similar to the normal driving state. Therefore, production of a shifting map based on a conception that is quite different from the conventional shifting map is not needed. Hence, past experience can be used for extracting therefrom parameters adjusting

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the driving performance of the vehicle, and deterioration of efficiency in the controlling operation can be prevented.